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ABSTRACT

Various outcomes for individuals that result from human relations training are surveyed. Desirable individual outcomes cited by laboratory educators include: (1) sensitivity; (2) managing feelings; (3) managing motivations; (4) functional attitudes toward self; (5) functional attitudes toward others; and (6) interdependent behavior (Gibb 1971). Other goals of laboratory training involve diagnostic ability, action skills, providing research and theoretical knowledge, relating learning to other situations, and learning how to learn. For research purposes, these general objectives must be organized into a more coherent framework. Cognitive and affective taxonomies of learning objectives (Bloom/Krathwohl) are supplemented by taxonomies that expand the context of purely educational objectives and facilitate comparision of findings among education, psychotherapy, and human relations training. Problems of establishing and measuring goals include optimizing one goal at the expense of others and the lack of consensus among raters of training outcomes. An examination of the relationship between outcome measures and participant satisfaction is important, since client satisfaction is often a prerequisite to client change. (NRB)

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The Measurement of Human Relations Training Outcomes

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The Measurement of Training Outcomes

This paper will survey the various outcomes that result from human relations training. In this paper outcomes are considered only for individuals: outcomes related to team building, organizational effectiveness, community cohesiveness, etc. will not be considered. This is one of the many limitations that have been necessary to make this project manageable. A further rationale for the exclusive focus on individuals is provided by Campbell and Dunnette (1968). They concluded that "while T-group training seems to produce observable changes in behavior, the utility of these changes for the performance of individuals in their organizational roles remain[s] to be demonstrated" (p. 73). Weisbord (1978), a well-known organizational development consultant, summarizes the efficacy of HRT (especially T-groups) in the organiational context. His more recent experiences fully support the earlier conclusion of Campbell and Dunette.

A brief discussion of individual outcomes that laboratory educators typically cite as goals will be presented first. The most widely used cognitive and affective taxonomies of learning objectives (Bloom/Krathwohl) will then be discussed and related to the training setting. Next, we will look at some supplementary taxonomies that will further map out the wide range of possible training outcomes. These supplementary taxonomies

provide an alternative (and expanded) reference frame for the Bloom/Krathwohl model, and are especially helpful in catagorizing outcomes in non-school settings such as counseling, personal growth groups, and psychotherapy. (This is a necessary addition because many human relations outcomes cannot be classified by the educational objectives of Bloom/Krathwohl.) The taxonomies we present will allow us to consider training outcomes in a context that goes beyond the Bloom/Krathwohl taxonomies. This approach will facilitate the comparison and contrasting of findings among education, psychotherapy, and human relations training.

The difficulties of optimizing one objective or goal at the expense of reducing the attainment of others will be discussed at length. Problems related to the measurement of outcomes will be identified. The frustrating lack of intersource consensus among raters of training outcomes (participant, trainer, and friend or colleague) will be compared to the similar difficulty found in psychotherapy research.

Our discussion up to this point will have focused primarily on tangible and observable measures of outcomes or, in the case of participant ratings, self-reports of learning. The relationship between outcome measures and participant satisfaction will be introduced at the end of this paper.

Typical Human Relations Training Outcomes

Gibb (1971) identifies the six most common objectives of human relations training cited in the literature:

1. Sensitivity. Training is aimed at inducing greater sensitivity to self, to the feelings and perceptions of other people, and to the general interpersonal environment. Sensitivity is seen as an input process involving greater awareness of the feelings and perceptions of others. It also has an output component, aspects of which are described variously as availability of self, transparency, openness, authenticity, or spontaneity.

2. Managing feelings. Trainers speak of such outcomes as awareness of one's own feelings, acceptance by oneself of the feeling component in one's own actions and speech ("owning" one's feelings), consonance between feelings and behavior, clarity of expression of feelings, and integration of emotionality into various life processes.

3. Managing motivations. The training literature refers to such hoped-for motivational outcomes as self-actualization, awareness of one's own motives, clear communication of one's own motives to others, self-determination, commitment, greater energy level, inner-directedness, and becoming.

4. Functional attitudes toward self. Practitioners mention acceptance of self, self-esteem, congruity of actual self and ideal self, and feelings of confidence as potential positive outcomes of training.

5. Functional attitudes toward others. Training is thought to produce such changes in attitudes as decreased authoritarianism, greater acceptance of others, reduced prejudice, reduced regard for structure and control, and attitudes commensurate with interdependence theories of management, such as "Theory Y" (McGregor, 1960) and "participative management" (Likert, 1967).

6. Interdependent behavior. Effective behavior is described variously as interpersonal competence, task effectiveness, teamwork, being a "good group member," democratic leadership, problem-solving effectiveness, or interdependence. (pp. 841-842).

Miles (1960) discusses two other training outcomes, diagnostic ability and action skills.

Diagnositc Ability: The skill of assessing ongoing situations in a way that enables effective action; the employment of appropriate explanatory categories to understand reasons for presented interaction.

Action Skill: The ability to intervene effectively in ongoing situations in such a way as to maximize personal and group effectiveness and satisfaction. This was [further] differentiated for our purposes into

> task-relevant behaviors and group maintenance-relevant behaviors, following the original distinction by Benne and Sheats (1948). (p.303)

Hipple (1973) identifies two additional goals: (1) to provide participants "with theoretical and research knowledge for sensitivity and action skills, and [2] to assist [the participant] in relating his learning to his back-home situation" (Hipple, 1973, p. 156).

We have reviewed ten very comprehensive goals of laboratory training. "A final objective underlying most laboratory education is 'learning how to learn.' Each learner is asked to become an analyst of his own processes of learning. This involves abilities to take initiative in seeking and using the resources of others to enhance his[/her] own learning" (Benne, Bradford & Lippett, 1964, p.18). Determining the appropriateness of risk taking might also be included in this last catagory (Bunker, 1965).

The goals cited above are a thorough, yet hardly exhaustive, list of possible training outcomes. These goals reflect the objectives of the trainers and/or sponsors of HR laboratories.For research purposes, however, these objectives are too broad. In order to determine specific training outcomes more concrete and objective goals will need to be specified. The next portion of this paper will discuss alternative ways of conceptualizing and organizing the general objectives cited above into a more specific coherent framework.

Taxonomies of Objectives - An Overview

It is important to recognize that there are no clear boundaries or distinctions governing the process or content of what a student learns. "The fact that we attempt to analyze the affective area separately from the cognitive is not intended to suggest that there is a fundamental separation. There is none" (Krathwohl et al., 1964, p.45). Sneerer (1954) suggests that it is not possible to separate learning into cognitive,emotional, and motivational components (p.123).

The standard catagories of learning objectives are the cognitive, affective, and psychomotor domains (Bloom, 1956). The most common and widely used taxonomies of goals in educational systems are Bloom's (1956) cognitive taxonomy and the affective taxonomy of Krathwohl, Bloom, and Masia (1964). The psychomotor domain will not be considered here.

Recent trends in humanistic education theory have emphasized the interdependence of cognitive and affective learning (1). Charles Hampden-Turner has developed an existential theory of T-group learning. His theory explicitly identifies the cyclical and interdependent nature of the various components of laboratory learning (Hampden-Turner, 1966). This provides further support for the interdependence and interrelationship among the various

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(1) The reader is referred to Krathwohl et al. (1964, pp. 48-60) for a more thorough discussion of the interrelationship between these domains.

domains of learning.

Despite the somewhat arbitrary distinctions between the cognitive and affective domains, these catagories will be used in this paper. This is done to provide a useful conceptual framework within which to organize different kinds of learning. A detailed discussion of the cognitive and affective domains follows, along with other taxonomies of learning that seem to shed light on the types of outcomes that human relations training tries to achieve.

The Cognitive Domain - Bloom

Many HR trainers feel that cognitive outcomes are secondary or peripheral in importance to affective goals. Human relations training (HRT) as a field has attempted to correct tne major imbalance of our western cognitive approach to schooling. In attempting to redress this inequity HRT has occasionally taken on an anti-cognitive stance. At other times, cognitive goals have been specified but they have been ranked as a low priority. Observing the list of goals that trainers frequently cite, we note only one purely cognitive goal (Knowledge of theory and research). Some of the other goals include a mix of cognitive and affective components (diagnostic ability, action skills, learning to learn).

Participants in HRT tend to experience a greater range of emotional responses in tne laboratory training setting than is typical in their day-to-day lives. This encourages

some participants to focus on the affective impact of the training. The study of Lieberman et al. (1973) indicates that individuals who learn the most from encounter-type groups do not concentrate exclusively on their affective state. "High Learners reported more critical incidents which involved the presence of insight and the reception of cognitive information, and they also rated understanding and insight as important factors in their learning" (p. 422). The ability to think, reflect, and conceptually organize one's HRT experience seems to be an important factor in a participant's growth, both during and after the group experience.

Bloom's taxonomy (1956) of the cognitive domain can provide a framework to understand the levels of cognitive learning that occur in HRT settings. Bloom's hierarchy of cognitive objectives has a high currency among educators, and is the taxonomy most frequently used to specify objectives in school settings. The taxonomy consists of five levels of learning. The levels of learning increase in complexity as one moves up the hierarchy. From the bottom of the hierarchy to the top, the levels are: Knowledge (or recall), comprehension, application, analysis, synthesis, and evaluation. Figure 1 provides a concrete example of how one could learn about group process, ascending through the various levels of the hierarchy.

Cognitive objectives are not frequently mentioned when specifying the goals of HRT. This author considers the lack

insert Figure 1 about here

of cognitive goals to be unfortunate, particularly in light of the fact that certain personality types benefit from such structure. Conceptually concrete (Hunt, 1971) and field-dependent (Witkin, Moore, Goodenough, & Cox, 1977) learners seem to profit the most from a highly structured learning environment. One manner of providing a higher degree of structure for HRT is the specification of learning objectives.The learning objectives specify the explicit outcomes (cognitive, affective, and mixed) that are expected to result from training. Although behavioral objectives are common to many formal school settings they are rarely found in HRT. Two exceptions are Ivey (1968) and Mezoff (1979).

Ivey developed an objectives-based HR curriculum. Unfortunately, that training program has not been widely implemented. The present author has developed a behavioral objectives-based training program that he uses in training Canadian public school administrators. Mezoff's experience indicates that the specification of explicit objectives in both the cognitive and affective domains facilitates student motivation and learning.

It is not expected that primarily affective-oriented trainers will respond favorably to the specification of precise cognitive training outcomes. The primary purposes of

the training will determine whether precisely specified cognitive goals are, in fact, desirable. However, there is evidence to support the view that a cognitive map of the laboratory experience is of significant importance in helping participants extend and apply their learnings beyond tne laboratory setting (Lieberman et. al., pp. 365-367). Affective experiences for their own sake, and in isolation from cognitive understanding, are likely to yield minimal gains for the laboratory participant.

The Affective Domain - Krathwohl

Affective objectives are tne primary focus of laboratory training. The majority of the goals cited at the beginning of this chapter fall into this catagory. This domain involves attitudes, feelings, and values. Personality traits, which are implied by tne highest level of the Krathwohl taxonomy will also be included in our discussion. Krathwohl organizes tne affective domain along a continuum of internalizatien. The hierarchy is organized from bottom to top by five major levels: receiving, responding, valuing, organization, and characterization by a value complex. The major levels and their subcategories are outlined in Figure 2 (2).

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(2) The reader is referred to Krathwohl et al. (1964) for a discussion of these categories. The lowest level of the hierarchy (1.0 Receiving) represents the least internalized state of affective learning and the highest level (5.0 Characterization by a value complex) represents the most internalized state of affective learning.

insert Figure 2 about here

Figure 3 shows a concrete example of the stages of internalization. The example illustrates one particular affective goal of the T-group: the process of receiving interpersonal feedback regarding the impact of one's self on others. Each of the subcategories of Figure 3 correspond to those of Figure 2. Provided in Figure 3 is a description of the behavior and/or affective state and a short quotation exemplifying how a person might verbally express that state.

insert Figure 3 about here

In a laboratory training event a certain level of personal involvement must be reached in order for a participant to progress up through the affective domain hierarchy. The more involved the participant, the greater the possibility of internalization of the learning. Conversely, when personal involvement is minimal, an individual will be precluded from achieving higher-order affective outcomes. Figure 4 illustrates a continuum of involvement for laboratory participants.

Figure 5 is the superimposition of Figure 4 onto Figure

insert Figure 4 about here

2. In Figure 5 we can see the interrelationship between laboratory involvement and the process of internalization that characterizes the affective taxonomy hierarchy. As we have indicated above, a highly involved participant has the possibility of greater internalization of affective learning, whereas a detached or withdrawn participant is precluded from all but a minimum of internalization of affective learning (There are, however, "active" observers in HRT who may learn as much as active participants). It is important to note that the level of involvement is a necessary, but not sufficient, prerequisite to the attainment of the corresponding objective in the affective taxonomy.There may be some exceptions to the relationship

insert Figure 5 about here

between involvement and internalization of affective learning. Psychotherapy research has demonstrated the efficacy of learning via methods other than direct involvement. Bandura (1969) claims that "virtually all learning phenomena resulting from direct experience can

occur on a vicarious basis through the observation of other persons' behavior and its consequences for them" (p. 118). There is some support for Bandura's claim in the training group literature: for example, McLeish and Park (1973) successfully taught empathy vicariously.

Are trainers justified in insisting upon client participation and involvement? Research by Babad and Melnick (1976) sought to answer this question. They found that active participation and emotional involvement correlated with both in-group measures and post-group evaluations of success. In an earlier study Miles (1965) concluded that "gains by participants were primarily predicted by variables connected with actual participation ..." (p.241). The findings of Liberman et al. support the contention that involvement is a key variable in determining outcomes from the group experience (p.371).

Apparently there is good reason for trainers to empnasize and encourage active participation. However, whether this implicit (and sometimes explicit) demand (3) impinges upon the client's freedom of choice remains a serious ethical consideration for trainers. Finally, it should be emphasized that involvement seems to be a necessary but not sufficient factor to ensure learning

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(3) While not all trainers demand participation, many trainers establish and encourage norms that put pressure on group members to participate. Even when trainer or group pressure to participate is absent, the social expectations related to the role of trainee are often felt as a demand by participants.

(Lieberman et al., p. 452).

Participants seem to gain benefits in proportion to the degree to which they invest themselves in the process. Figure 5 demonstrates the rationale behind the adage told to many participants that "what you get out of the T-group depends on what you're willing to put into it."

It is also apparent, from viewing Figure 5, that high involvement in a human relations laboratory does not ensure the transfer of learning to the back-home environment. A participant can value a behavior (level 3.0) through any of the subcategories: acceptance (level 3.1), preference (level 3.2), or commitment (level 3.2). Still, the person has yet to reach organization (level 4.0), or characterization by a value complex (level 5.0). This may explain why many researchers have noted fade-out effects in post-laboratory changes (Back, 1972). Personal growth made during the lab can frequently be extinguished by a hostile and/or unsupportive organizational climate (Smith, 1975).

Self report instruments are the most frequent source of data on training outcomes. Yet, self reports tend to be biased towards favorable ratings of the experience (even when lasting personality changes may not be achieved). This can be seen by observing that the "valuing level" of the Krathwohl taxonomy is only an intermediary stage on the way to "Characterization by a values complex."

Proponents of sensitivity training tend to favor

measurement of outcomes via ratings, while the skeptics tend to prefer psychometric tests (Smith, 1975). There are problems associated with both these approaches (see section entitled "Problems of Measurement of Outcomes" page 27). Self-reports may only tap the "value" level changes, whereas the psychometric tests are clearly tapping a level of greater internalization of the lab learning.

So far we have exclusively used the Krathwohl taxonomy for specifying affective outcomes. In spite of the fact that the Krathwohl affective taxonomy was developed specifically for school settings, educators have not adopted the taxonomy as extensively as the Bloom cognitive taxonomy. One reason for this seems to be that affective education is a relatively new field of teaching - a field which has not gained widespread support and acceptance among teachers.

The Krathwohl taxonomy is not particularly comprehensive for non-school settings and it fails to include many common HRT goals. It also may have an inherent cognitive bias. Some educators believe that the "implicit intent of educational evaluators is to use the [goals of the Krathwohl taxonomy] as a means to the end of cognitive objectives" (Brandhorst, 1976, p.3).

We must look to other taxonomies to explore affective goals that are an end in themselves, rather than being purposive (a means to an end, as in the Krathwohl taxonomy). Such taxonomies will be discussed in the next section.

Other Affective and Mixed Cognitive/Affective Domains

This section will review other taxonomies of affective outcomes and skills that draw from both the cognitive and affective domains. Models most appropriate for categorizing HRT outcomes will be treated in greater depth than those that are less applicable.

Brandhorst (1978) has reconceptualized the affective domain to include goals that are ends in themselves, such as effectence, efficacy, competence, and analytic coping ability. He describes three categories of objectives. The first is ego-involvement, which involves the behavioral expression of personality style. Empathy is a goal of HRT that is subsumed in this category. Another category is "motivation". This dimension assumes a basic human need for active involvement in the area of aesthetic creation and experience. Risk-taking, a common training goal, is subsumed by the motivation dimension. The last category, "moral development", includes valuing others for their own sake (certainly a meta-goal of HRT).

Weinstein (1977) offers a hierarchy of self-knowledge, along with a process for expanding knowledge of self. This process involves a model that could be used implicitly or explicitly in training to increase affective learning. Weinstein's model involves both cognitive and affective processes. The model is designed to accomplish affective goals as well as cognitive learning of a personal nature.

There are various taxonomies of skills that include a mix of both cognitive and affective components. The most common dichotomy of skills is analytical versus "clinical" (Turner & Lombard, 1969). Another scheme uses the terms conceptual skills, technical skills, and human skills (Katz, 1954). This section will only present taxonomies of "clinical" or human skills. HRT may, on occasion, involve skill building in the analytical, conceptual, or technical categories. However, these areas are much less likely to be the focus of training than interpersonal skill building. Two taxonomies will be presented here: Ivey's microskills and Brandhorst's domain of relational objectives. Both models have direct applicability to HRT settings.

Ivey's (1971) microskills training program teaches communication skills that are transferable to counseling, education, or everyday interpersonal situations. Skills are divided into attending (or listening) skills and influencing skills (see Figure 6). Ivey's microskills are non-complex, observable, and objectives-based. Microskills training is practical and powerfull. A considerable body of research evidence has documented the effectiveness of the microskills approach (Toukmanian & Rennie, 1975).

insert Figure 6 about here

Brandhorst's (1976) taxonomy of objectives in the relational domain provides a structure for evaluating action learning. The relational taxonomy conceptualizes interpersonal skills in terms of measurable behavior. The six categories reflect aspects of leader behavior that occur in the small group setting. Catagories are cognitive (conceptualization), cognitive-affective (evaluation), or cognitive-affective-behavioral (leading, following, role-exchange yielding, and role-exchange asserting). Although this schema was developed for analysis of outcomes in small task-oriented groups, it is equally applicable to the HRT setting where non-task oriented groups (viz., T-groups) predominate.

In this section we reviewed some specialized taxonomies of learning that complement the Bloom-cognitive and Krathwohl-affective approaches discussed earlier. It is indeed difficult to find an exhaustive and inclusive model that can adequately represent the depth and range of HRT outcomes. There does not seem to be an easy way to synthesize these various perspectives into a coherent and inclusive framework.

Faced with such complex choices among the taxonomies, the reader is likely to feel overwhelmed by the options that exist for evaluating HRT outcomes. This paper will not attempt to provide an integration among the various taxonomies. This section and the two previous ones have instead attempted to provide some different perspectives or

reference frames with which to view training goals.

Some goals will be more important than others. Given the multitude of goals and a variety of ways with which to view them, how is it that we can establish a ranking, or balance among them? Importance depends upon the purpose of the training, the participant's personality, and the organization culture (or life-setting) that the individual will return to.

The next section will discuss one of the problems that arises out of trying to set priorities among goals: Whenever we focus on certain goals, it often happens that these are pursued at the expense of others. This problem will be called suboptimization.

The Suboptimization Dilemma: A Problem in Establishing Goals

Suboptimization means that the achievement of goals is less than it could be. Suboptimization occurs when the training focuses on one particular goal at the expense of others: either over the entire course of the training or during some component of it. This can occur in two ways: teaching-suboptimization and measurement-suboptimization. Teaching-suboptimization occurs during the teaching process wnen the teacher focuses on a limited number of goals. Measurement-suboptimization occurs when the measurement instruments utilized only tap a limited number of the teaching goals. Both conditions can result in reduced

achievement of training goals.

The teaching-suboptimization problem results in a reduced benefit from the training program than would be achieved if a more balanced emphasis were placed on each of the diverse goals. Measurement-suboptimization occurs when there is an insufficient sampling of the total net gain from an educational/training program. The observed effects of training provide a limited and perhaps misleading picture of the actual outcomes. This bias could be detected if a more comprehensive evaluation took place.

Teaching-suboptimization and measurement-suboptimization can occur independently or simultaneously. Figure 7 illustrates the various combinations that can occur between the two dimensions. The teaching dimension, horizontal on the page, actually represents a continuum from highly optimized teaching (left end of the continuum) to highly suboptimized teaching (right end of the continuum). For illustrative purposes the continuum has been divided into only two conditions: optimized and suboptimized. Similarly, the measurement dimension (vertical on the page) represents a continuum from highly optimized (top of the page) to highly suboptimized (bottom of the page). The measurement continuum has also been represented in a simplified form showing only two conditions, optimized and suboptimized.

Figure 7 demonstrates the three possible cases of suboptimization; teaching-suboptimization (upper right

insert Figure 7 about here

quadrant), measurement-suboptimization (lower left quadrant), and the combination of both occuring simultaneously (lower right quadrant). The optimal condition (upper left quadrant) is achieved when there is an appropriate emphasis (in terms of weighting and priority) among the goals during both the teaching and the measurement (evaluation) processes.

The teaching-suboptimization problem (focusing on a limited number of the curriculum goals) may occur either within and/or across the cognitive and affective domains. For example, teaching-suboptimization occurs within the cognitive domain when precedence is given to teaching certain levels of knowledge (usually the lower levels) at the expense of others. Teaching-suboptimization is further compounded when we consider the affective and mixed domains in addition to the cognitive. A focus on exclusively cognitive outcomes can essentially preclude affective learning. Teachers focusing on cognitive outcomes may be a consequence of the teachers' preference or bias (1). This situation has been characteristic of the majority of Western schooling. Students will probably remain unaffected in the

(1) This selective focus might be conscious on the part of the teacher, or it might be unconscious.

ignored goal areas.

Measurement-suboptimization can result in both major and minor problems in terms of results of the training. The severity of the problem depends upon whether we are looking at short-term or long-term implications. Short term implications are minor, while long-term implications are considerable.

The short term implications of measurement-suboptimization are simply a neglect of measuring certain goals. Presuming that the student is taught optimally (lower left quadrant), measurement-suboptimization results in an oversight of the unevaluated goals. The student learns in many areas, but is only evaluated in one or two. This is not as serious a problem as the long term implications of teaching-suboptimization.

Measurement-suboptimization, over the long term, can drastically impede the learning process. For example, a school curriculum may include a wide and balanced set of cognitive and affective objectives. If students are only tested on the cognitive outcomes, then it may appear to students as if the affective goals are not taken seriously. Learning theory predicts the effects of reinforcement of selected educational objectives: those objectives that are most frequently tested are likely to reinforce and alter student behavior.

This process of selective testing, should it continue over time, represents a feedback loop. Students will probably be more academically successful when they ignore the affective curriculum goals. This will probably continue in an ever-increasing fashion. This neglect of the affective curriculum can occur despite the fact that the teacher continues to emphasize affective goals in classroom teaching. The students just will no longer take the affective goals seriously.

Measurement suboptimization can be found in HRT. If cognitive outcomes are overlooked in the assessment of HRT the we can expect a decrease in student learning in this area.

Measurement Suboptimization and Student Personality Characteristics

Student personality traits can interact with the various types of assessment instruments employed. Some students will perform better than others simply due to their predisposition toward particular testing proceedures. These shifts in student test performance, based on a different form of evaluation, can be dramatic and startling. For example, anecdotal evidence suggests that some students who perform well on multiple choice exams perform poorly when tested via essays, while for others the reverse is true.

So apparantly selecting one evaluative instrument may obscure significant gains made in other unmeasured (yet

closely related) areas. These evaluation biases (and their related measurement problems) are found at all educational levels. Certain personality types perform more or less effectively on different types of tests. Some personality characteristics (e.g. conceptual level) have been found to interact with particular testing procedures. Conceptually abstract (Hunt, 1971) students perform better in subjects requiring critical thinking, analysis, and generation of alternatives. Conceptually concrete students achieve higher grades in subjects requiring memorization (p.40). Conceptually abstract students were matched on intelligence with a group of conceptually concrete students. "The two groups did not differ on an objective examination, but the [conceptually abstract] group performed significantly better than the [conceptually concrete] group on an essay examination" (Hunt, 1974, p.51).

Suboptimization in Human Relations Training

Various measures of outcomes from T-group training are not strongly correlated to each other. That is, gains in one area tend to be unrelated to gains in other areas. Smith (1971) investigated the correlations among five measures of outcomes from T-group training (viz., interpersonal awareness, dianostic ability, attitude change, trainer evaluation, and job behavior change). He found that " three of them - Job Behaviour Change, Trainer Evaluation, and Diagnostic Ability - tend to go together, but the other two

are quite independent. This finding underlines the importance of clarifying the specific goal of a particular programme" (p.509).

If teaching and/or measurement suboptimization can occur within the cognitive dimension alone (depending upon the level of hierarchy), then they become an even more acute problem when we consider the wide range of affective and mixed cognitive/affective outcomes sought in HRT. Smith's (1971) findings suggest that greater attention must be paid to specifying outcomes for HRT.This does not necessarily mean limiting the number of objectives, but rather making clear those that are already established.

Smith (1971) even found a negative correlation (-.26 at $p<.10$) between diagnostic ability and attitude change. In a recent review of controlled studies of sensitivity training, Smith (1975) notes that "numerous authors from Miles (1960) to Lieberman et al. (1973) have commented that their various indexes of change after training correlated poorly with one another" (p. 599). If goals are negatively correlated, then to achieve certain goals may inhibit the achievement of others.

Summary

Goal achievement can be measured by objective assessments in educational settings. The earlier discussion, however, has revealed how measurement suboptimization can occur. In counseling and human relations training we rarely find objective assessment measures. Self-reports of goal

attainment are most common, and are occasionally supplemented by more "objective" ratings from therapist/trainer, friends, colleagues, and/or family members.

The lack of consensus among these raters will be discussed in a later section of this paper. However, the fact that evaluations are generally inconsistent among raters signifies that measurement-suboptimization can occur here as well. Do we attempt to achieve high self-reports of change, even if they are not corroborated by outside judges? Or do we strive for sucessful ratings of change from significant others, even though the participant does not evaluate him/herself as positively changed? Neither extreme is desireable.

In summary, suboptimization occurs when there is an imbalance of goals. In the teaching process, suboptimization occurs when a limited number of goals are taught. Measurement-suboptimization occurs when one goal (or criterion measure) is focused on, to the neglect of other (perhaps equally) important goals. The effect of teaching suboptimization and measurement suboptimization (over the long term) is that overall goal achievement is less than it could be if each of the various sub-goals were balanced and weignted appropriately.

Problems of Measurement of Outcomes

A problem related to measurement-suboptimization is "measurement-orientation." Measurement-orientation occurs when convenient measurement criteria are used to determine the achievement of a particular objective. The measure used may occasionally become the focus of the training, to the neglect of the original objective. In the classroom this is known as "teaching to the test". This is a process whereby teachers disregard a more abstract goal (e.g., critical thinking, good citizenship, etc.) in favor of a concrete one, in an effort to achieve high test performance.

Conversely, global measures are sometimes used as evidence of specific concrete learning. This also can lead to measurement-orientation. This problem can be seen in human relations training. An HRT program may be designed to achieve competence in certain interpersonal skills. Due to the difficulties and expense of rigorous performance testing, we might choose to assess goal achievement through various self-report measures. We must be careful that our training does not then focus only on increasing the participant's sense of worth. Increased feelings of self esteem can markedly influence self-reports of skills, regardless of the veracity of the self-report. It would be unfortunate if inaccurate "glowing" self-reports of competency led us to evaluate a HR skill competency training program as sucessful. However, this is not a rare or atypical occurence.

The variety of goals discussed earlier presents a difficulty in deciding exactly which outcomes to evaluate. "The number and kinds of degrees of freedom in our design is an implicit statement of the position we take regarding the aims and goals of training .... We may study only a narrow range of dimensions, in which case we are by implication narrowing the goals of training, or we may include any conceivable kind of change, in which case we are implying that one kind of change is as good as another" (Harrison, 1967, p.9).

In addition to the diverse goals of training, there exist many types of outcome measures for each goal. "Enthusiasts for sensitivity training tend to favor ratings ... while skeptics prefer psychometric tests, preferably generalized ones rather than those relating closely to specific training goals "(Smith, 1975, p.599).

Since it is possible to alter attitudes through training witnout modifying personality variables, global measures are not as likely to reveal evidence of change. Self-ratings are subject to participants' self-deceptions, as well as to both conscious and unconscious attempts to deceive others (Wylie, 1960).

Evaluation via ratings is further complicated by the infrequent replication of instruments in different studies. The inappropriateness of some evaluation instruments has been treated in the earlier discussions of suboptimization and measurement-orientation. Research instruments "must be

acutely tuned to the purposes and methods of the group" (Bennis et al., 1957, p.340).

Test-sensitization effects may also occur (Jeffers, 1972). Taking a pretest may influence post-training evaluation measures. Research studies which do not take this into account (e.g. A Solomon four-group design) run the risk of failing to discern the effects of test-sensitization. The Jeffers (1972) study employed Shostrom's Personal Orientation Inventory (POI) and discovered a significant test-sensitization effect . The POI is one of the most widely used instruments in the HR field. If the Jeffers finding is replicable, "it will severely limit the usefulness of [the] POI in assessing training effects" (Smith, 1975, p. 602).

Taylor (1955) reports a marked increase in the similarity of self-image and ideal-self image on repeated tests administered over short time intervals. Most training measures are what Campbell (1957) calls "reactive". A test-treatment interaction is therefore quite likely (Miles, 1960, p. 302).

Determining the effects of training is sometimes dependent on the timing of data collection. Two apparently contradictory phenomena have been observed in the comparison of post-lab and and delayed measures. One effect is the "fade-out", where changes are significant immediately after the lab but disappear over time (usually 3-6 months). This deterioration effect is what one would expect. The other

unexpected phenomenon is the "delayed reaction", where the training does not appear to have a significant impact immediately after the lab but an impact occurs over time.

The fade-out effect is probably related to organizational or interpersonal situations that the HRT participants return to. Where back-home values and norms are in marked contrast to HRT-type values there is likely to be an extinction of lab-induced changes. Where measured changes are reinforced by the back-home situation, we may expect these changes to persist over time.

Smith's (1975) review of controlled studies of sensitivity training indicates that two-thirds of the studies evidenced a persistence of change at follow-up. The persistence depended upon who was doing the rating (co-participants rated changes higher than others not present during the training) and upon the type of measure employed. Smith notes that changes "in a particular area may reflect the type of measure most often used in that area rather than greater or lesser incidence of change" (p. 616).

The delayed reaction phenomema was found in Harrison's (1966) study. Changes at six weeks were positive but not significant. Changes increased to higher (and statistically significant) levels after six months. Harrison interprets this finding via Lewins' model of behavior change: the process of "unfreezing", "change", and "refreezing." Permanent change (refreezing) may not be evidenced until long after the laboratory experience. Harrison alludes to

the complications (greater variability and inconsistency, etc.) that arise from attempting to measure change in the unfrozen state (1967, pp. 7-9). The timing of data collection, as discussed above, can obvously have a significant effect on whether or not we find evidence of training changes.

The measurement of outcomes is further confounded by other problems. Harrison (1967) notes "the fact that a person is in a control group biases his self-image and the perception of him by others; the fact that a person has participated in training inclines him and others to look for changes in his behavior" (p. 3). Smith (1975) discussed the non-equivalence of so-called control groups, such as in the Schutz and Allen (1966) study. Where controls do not volunteer for training, they cannot be considered equivalent to those who do volunteer. Harrison notes that even among controls who have volunteered for training, there are those who delay their participation in training out of ambivalence or reluctance to attend (1967, p.4). Miles (1960) notes that "persons appearing for human relations training are highly self-selected, and it is excessively difficult to get comparable pools of subjects to serve as members of control groups" (p. 302). Random selection of participants for training rarely occurs.

Observer bias is another difficulty of measurement. Observers in the back-home setting usually know who has

received training and who has not. If the experimenter contrives a temporary situation with an observer unknown to the subject, observer bias may be reduced. However, the cost is that the contrived situation usually has little external validity. Furthermore, many researchers have failed to disclose whether or not their judges worked blind (Smith, 1975, p. 610-611).

Substantial evidence in psychotherapy indicates that therapists may be the most biased raters of change (Gomes - Schwartz, Hadley, & Strupp, 1978, p. 437). Trainers are probably less personally invested in their clients' growth than psychotherapists. However, a similar lack of objectivity may limit their accuracy in evaluating outcomes.

Miles (1960) reports that trainer ratings were the only lab criterion measure significantly related to change on the job. Trainers were 71 percent accurate. However, "an accuracy figure of 73 percent could have been obtained by predicting that <u>everyone</u> would show change" (p. 305). The difficulties of obtaining accurate ratings are numerous. The lack of consensus among raters will be discussed next.

The following discussion on the problem of intersource consensus is drawn primarily from research findings in psychotherapy. Many phenomona are comparable across the sometimes grey line between HRT and growth-oriented psychotherapy for normals. In psychotherapy "patients, therapists, and outside judges often do not agree upon the amount of the change the patient has manifested"

(Gomes-Schwartz et al., 1978, p. 437). Therapists and their patients seem to focus on different aspects of the psychotheraputic process and tend to evaluate the outcome of their relationship by markedly different criteria (Feifel & Eells, 1963). "Recent reviewers ... reluctantly conclude that it may be futile to search for consensus among diverse sources of outcome measurement" (Berzins, Bednar & Severy, 1975, p.10). "The criterion problem has been one of the perennial stumbling blocks in psychotherapy research" (Strupp, 1977, p. 7). One of the difficulties is that improvement criteria "are subject to value decisions that are difficult to agree on" (Lambert, Bergin, & Collins, 1977, p. 475). Berzins et al. (1975) suggest two remedies: the development of consensual measures of outcome and the use of multimethod factor analysis instead of ordinary factor analysis. Even if these solutions were to be implemented, they would require large samples and large-scale collaborative research. It is unlikely that these methodologies will be applied to training settings in the near future.

Raters of training include: the trainer, the participant, other participants, independent judges, and back-home observers (organizational colleagues, family members, and/or friends). The possibility of trainer bias was discussed earlier. Participant ratings on global measures of self-concept are frequently found to increase with training. Some of these changes fade out and others

remain. Length of training may be a critical variable that determines whether the changes take hold (Smith, 1975, p. 601). Participant ratings on specific aspects of self-concept (e.g. openness to others or to new experiences) "are much more likely to yield significant effects than are global measures" (Smith, 1975, p. 605). The durability of specific ratings has not often been investigated.

A few studies employed independent raters and specially contrived test situations, Most of these studies did find an effect, however only one employed an additional delayed measure. Despite the fade out on the follow-up test, Smith's (1975) review concludes that the results of these investigations are encouraging (p. 611).

Over 90% of the studies employing back-home observers found at least some of the expected effects of training. As mentioned earlier, a limitation of these ratings is the problem of the observer knowing who has been trained (Smith, 1975).

Lieberman et al. in their exhaustive study of encounter-type groups report that "[c]orrelations among leader ratings of change, participants' judgements of their own change, and coparticipants' judgements of change hovered around zero, reaching a maximum of .20" (p. 99). Despite the various positive effects reported by Smith (1975), there seems to be little agreement among raters as to exactly who changed and how much they did change.

Summary

In an earlier section we discussed the measurement problems related to suboptimization. This section has treated a number of additional issues. Related to measurement suboptimization is the problem of measurement orientation. Measurement orientation occurs when inappropriate criterion measures become the focus of the training, to the neglect of the original objective. We discussed the diversity of HRT goals and outcome measures, and tne inappropriateness of some outcome measures. Test sensitization and the timing of data collection can also effect the results that we observe. While considering timing we noted cases of both deterioration and delayed reaction effects. Problems of inadequate control groups and observer/rater bias were also discussed. Finally, the problem of intersource consensus in psychotherapy was highlighted, and it was suggested that many of the same problems can also occur in the training setting.

Satisfaction vs. Performance

This section will discuss the relationship between outcome measures (performance tests, trainer ratings, co-participant ratings, etc.) and participant satisfaction. The perplexity of obtaining either objective performance measures or self reports of skill-achievement was mentioned in the previous section. This section will focus specifically on the dilemma of satisfaction versus

performance. It would superficially appear that satisfaction and performance should be related. However, some of the literature indicates otherwise: negative, contingency, and no relationships sometimes occur. Research findings will be drawn from the fields of education, psychotherapy, and leadership.

The field of education is an area that has objective performance measures. However, as we discussed earlier, the results can be drastically altered as the mode of measurement is changed (e.g., multiple-choice to essay format test). Does the level of students' achievement correlate with students' ratings of courses?

A number of studies, reviewed by Costin, Greenough, and Menges, investigated the relation between students' ratings of instruction (an indirect measure of their satisfaction) and their expected or actual grades. Out of thirty-one studies, fifteen found no relationship. One study "found a negative correlation between course grades and students' judgements of 'instructional competence'" (1971, p. 518). The twelve studies that found significant positive relationships typically revealed relatively weak correlations (viz., R=.20 to .35). The relationship of student satisfaction to student performance may depend on the field of study. Students' ratings of teachers nave been found to correlate negatively with student achievement in very abstract courses (Rosenshine, 1975). The measures of educational achievement are primarily cognitive in nature.

Where affective goals predominate, one would hypothesize a somewhat stronger positive relationship between satisfaction and learning outcomes. Presumably, satisfaction would lead to greater willingness and receptivity, both of which are likely to be important for affective learning.

Figure 8 represents a grid of learning outcomes from education, human relations training, and psychotherapy. In education we find predominantly cognitive outcomes and in psychotherapy we find primarily affective and/or behavioral outcomes. Human relations training includes outcomes of all three types. As we move from left to right along the continuum (see Figure 8) we can expect willingness and receptivity (and therefore satisfaction) to play an ever stronger role in determining outcomes.

insert Figure 8 here

Receptivity and willingness are crucial for effective psychotherapy. Most psychotherapeutic approaches explicitly address this issue, and recognize the need to work through the blocks to receptivity (i.e., "resistance" in the Freudian terminology). Counseling and psychotherapy are notorously ineffective with unwilling, captive clientele (e.g., prisoners, non-voluntary mental patients, etc.). Assuming there exists client willingness and receptivity,

this is not enough to ensure psychotherapeutic gains. There must also be an ability to work sucessfully in a given therapeutic mode. For example, low intelligence may preclude a client from sucess in conventional Freudian analysis. Furthermore, there must be an effort on the part of the client to follow through, apply, and transfer his/her learning from the therapy session to everyday life.

Given the importance of receptivity and willingness, satisfaction in psychotherapy ought to correlate with psychotherapeutic gains. Patient-perceived therapeutic conditions have been found to correlate strongly with outcomes in individual psychotherapy and counseling. However, the data from investigations in group therapy settings fail to show any similar type of relationship (Gurman, 1977, p. 523-524). Both methodological limitations and, as we discussed earlier, the lack of reliable and valid outcome measures limit the significance of the psychotherapy research reviewed by Gurman. The HRT setting is more similar to group therapy than to individual counseling. It is in the group therapy setting where outcomes have not correlated with patient-perceived therapeutic conditions. Therefore, we must be especially cautious about hypothesizing any relationship of client satisfaction and HRT outcomes.

The leadership research is cited here because some of the leadership findings are drawn from investigations of behavior in small group settings. It was long presumed that satisfaction with one's organizational role correlated with

high levels of job performance. Various content therories of motivation (i.e. Maslow's Hierarchy of Needs and Herzberg's Two-Factor Theory) were predicated on this assumption. In its simplest form the relationship was expressed as: "happy employees work harder." This relationship was questioned as early as 1955. In 1964 Vroom (p. 183) analyzed the results of twenty studies and found the median correlation between satisfaction and performance to be very low (.14).

There is not a one-to-one correspondence between satisfaction witn work and satisfaction with training, nor between job performance and performance as a result of training. However, the fact that job satisfaction and performance are not strongly related suggests that we may have some basis for questioning the correlation between satisfaction with training and training performance.

The leadership, psychotherapy, and educational findings discussed above suggest that there may not be a strong correlation between satisfaction and performance in training. It is interesting to note that the continuum (Figure 8) from education to psychotherapy (for normals) reflects a continuum of increasing freedom for the client to terminate the relationship.

Younger students are forced by law to attend school. Secondary school and college students are required to take many courses to meet degree and certification requirements. On the other hand, many clients of counseling and psychotherapy opt to terminate their therapy after very few

sessions. Although training participants infrequently drop out of their short-term training sessions, those individuals who are turned-off to the training (especially HRT) will seldom return.

The examples cited above indicate that willingness and receptivity become more crucial (at least in terms of continued exposure) as one moves from the left to the right of Figure 8. Satisfaction and exposure do not ensure performance and/or results. However, dissatisfaction and a termination of contact with the training will certainly lead to minimal results. It may be inferred, therefore, that satisfaction is a necessary (but not sufficient) prerequisite to productivity. Satisfaction would seem to be more critical (as a prerequisite to continued exposure) as one moves from the left of Figure 8 to those processes that include a greater affective component.

We have just discussed the lack of a clear relationship between satisfaction and performance. When discussing matching models, this lack of a relationship will again pose a dilemma: do we match for satisfaction or performance? Obviously, performance represents the "bottom line" and tells us whether or not we have achieved our stated objectives. However, for long term training goals, our bottom line figures may not show up for years. In those situations we should acknowledge the importance of satisfaction as an important moderating variable, at least

as a factor to ensure continued exposure to training.

Other situations may indicate that for client growth we should strive to achieve a certain optimal degree of tension. Moderate amounts of dissatisfaction, dissonance, or stress are important in certain developmental processes (i.e. Kohlberg's stages of moral maturity, or Hunt's conceptual level). Before attempting to increase a client's level of functioning ("unfreezing" their behavior) it is usually necessary to establish a theraputic relationship characterized by the change agent's intrinsic acceptance of the client. This bond is another way in which client satisfaction is a prerequisite to client change. In discussing matching models it will be important to identify whether we are matching for satisfaction or performance. In the case of matching for performance, we must wisely choose the most appropriate performance criteria.

Summary

This paper on the measurement of training outcomes began with a listing of HRT goals commonly cited in the training literature. Next, we explored various taxonomies and schemes for categorizing goals. The rest of the paper was devoted to the various problems associated with establishing goals and measuring their attainment. Finally, we also discussed the lack of correlation between satisfaction and performance.

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1.0 Knowledge - Hear a lecture about group process and be able to recall at least three characteristics or roles associated with task-oriented behavior and maintenance-oriented behavior.

2.0 Comprehension - Demonstrate an understanding of the above characteristics or roles by describing them in your own words.

3.0 Application - Identify when these characteristics or roles have occured in your T-group or task group.

4.0 Analysis - Discuss the relationships between and among the various occurences described above.

5.0 Synthesis - Relate the analysis above to the group dynamic that occured in your group. Discuss how the individual components were related to the total phenomenon taken as a whole.

6.0 Evaluation - Appraise your experience in the lab using the criterion of the group's importance in helping you to understand the process of group functioning.

Figure 1. Taxonomy of Cognitive Objectives.
(An example related to the cognition of group process is provided for each level.)

1.0 Receiving

- 1.1 Awareness
- 1.2 Willingness to receive
- 1.3 Controlled or selected attention

2.0 Responding

- 2.1 Acquiescence in responding
- 2.2 Willingness to respond
- 2.3 Satisfaction in response

3.0 Valuing

- 3.1 Acceptance of a value
- 3.2 Preference for a value
- 3.3 Commitment

4.0 Organization

- 4.1 Conceptualization of a value
- 4.2 Organization of a value system

5.0 Characterization by a value or a value complex

- 5.1 Generalized set
- 5.2 Characterization

Figure 2. Taxonomy of affective objectives (from Krathwohl et. al

1.0 Receiving

1.1 Conscious of the opportunity to receive interpersonal feedback (ifb). This is almost a cognitive behavior.

"I understand that people sometimes get feedback about their behavior in these T-groups."

1.2 Willingness to tolerate ifb, and not avoid it. This willingness to take notice of ifb in a neutral manner is also partially cognitive.

"I guess I'm willing to hear your perceptions of me."

1.3 Attention is paid to ifb. Other distracting stimuli are avoided.

"I wish you two would stop joking around while Bill is giving me his feedback. It's hard for me to hear him with your noisy distractions."

2.0 Responding

2.1 Allows him/herself an emotional reaction in response to ifb, but doesn't fully accept the necessity for doing so.

"If I hear feedback that's not flattering, I think I'll feel hurt. I'm not sure I want that to happen."

2.2 Voluntarily chooses to receive ifb and is involved and commited to hearing it and reacting to it.

"I'd like to have your feedback on how I'm coming across. It's really important to me to get your honest perceptions and reactions."

2.3 Receives ifb voluntarily and enjoys a feeling of satisfaction and zest from the experience.

"It sure was scary and exhilarating to hear feedback from the other group members. It was quite an experience."

3.0 Valuing

3.1 Tentative belief that ifb is implicitly good.

"Feedback was sure a good experience for me here, in this lab. Maybe it would be good in other situations as well. I wonder."

3.2 Commited to seeking out and pursuing ifb.

"I've been asking for feedback from some of my superiors and subordinates at work. I've even asked my husband."

3.3 A high degree of certainty and conviction about the value of ifb.

"Hearing feedback from others has really helped me understand how others see me, and why they react the way they do. It's been one of the most important things thats happened to me!"

4.0 Organization

4.1 Relates the value of ifb to other values that he/she holds.

"I guess I could be more honest with others than I usually am. I know how important feedback has been for me. Perhaps I owe it to others to be more open about my reactions to them."

4.2 Organizes the value of ifb into a complex of values, and brings order to the relationships among the values.

"I can see that giving and receiving feedback is just one step toward having more honest and richer interpersonal relationships."

5.0 Characterization by a value or a value complex

5.1 Predisposition to act (without conscious forethought) in a way consistent with a value complex of which ifb is a component.

"My husband and I share how we're feeling much more often. We even talk about how we're feeling towards each other."

5.2 An integrated view of the universe or philosophy of life (and consistent interpersonal behavior) that includes the value of ifb.

"I feel like a much more open person. My life feels much richer and fuller. The risks I've taken to get closer to other people have been worth it, despite the pain that comes from unmet expectations."

Figure 3. Taxonomy of affective objectives. In each subcategory a general and a specific example are provided. Examples are related to the process of receiving interpersonal feedback (ifb).

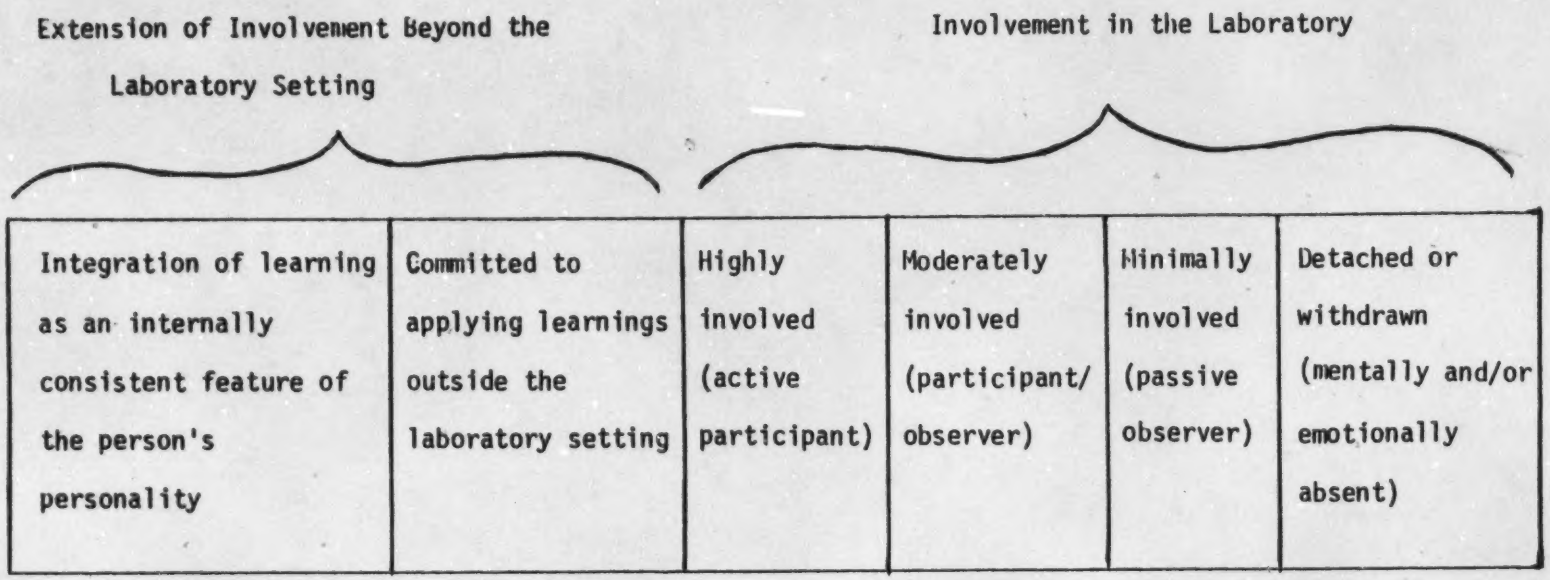
Extension of Involvement Beyond the Laboratory Setting
Involvement in the Laboratory
Integration of learning as an internally consistent feature of the person's personality
Committed to applying learnings outside the laboratory setting
Highly involved (active participant)
Moderately involved (participant/ observer)
Minimally involved (passive observer)
Detached or withdrawn (mentally and/or emotionally absent)

Figure 4. A continuum of involvement in the laboratory learning process.

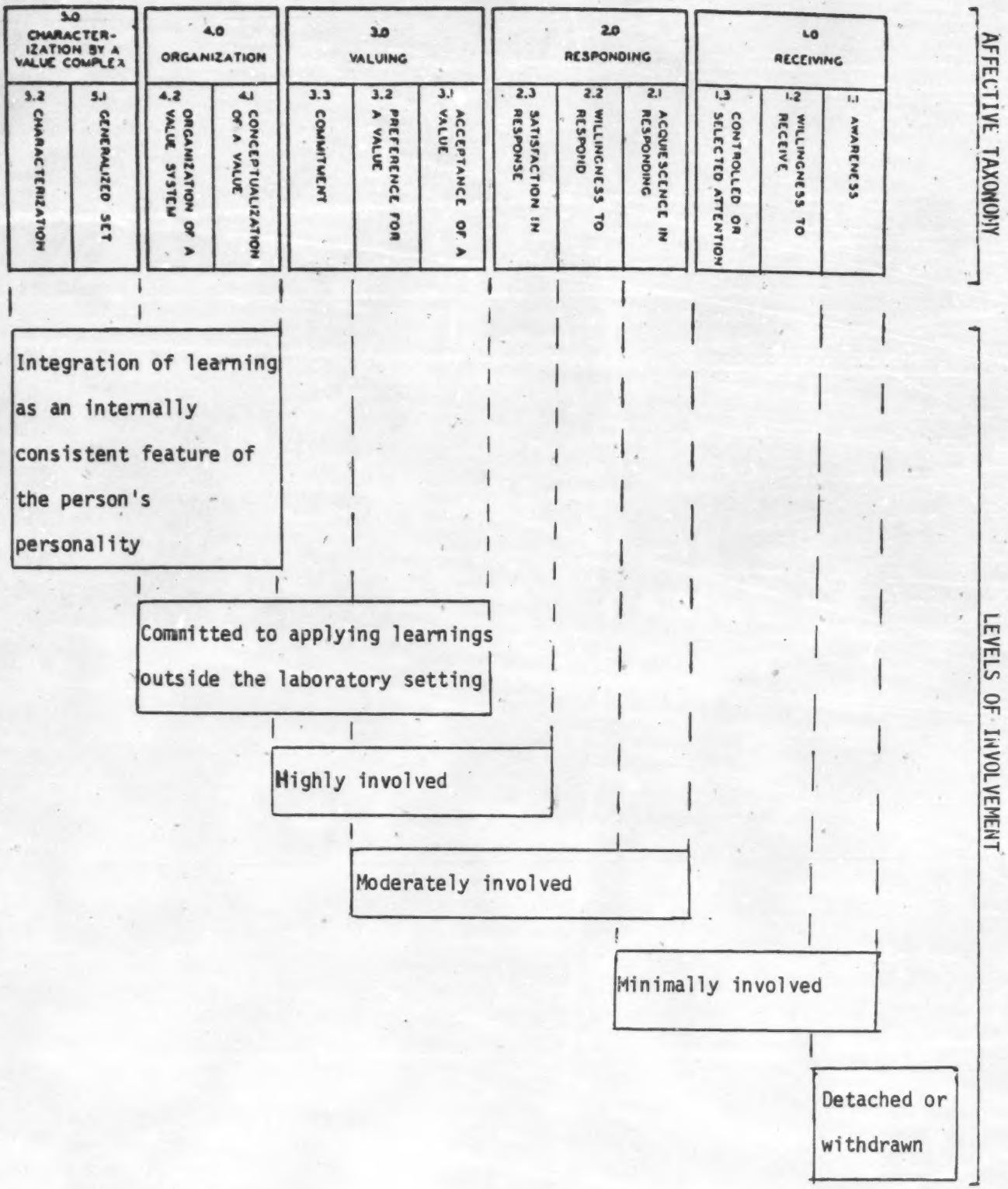

Figure 5. Taxonomy of affective objectives and the corresponding levels of individual involvement in the laboratory process required to attain them.

Attending Skills

Attending - body posture, eye contact, etc.

Minimal Encourage - head nods, restatement, and "uh-huhs".

Paraphrase - feeding back verbal content of other person's message.

Reflection of Feeling - feeding back affective tone of other person's message.

Summarization - demonstrates understanding and integration of all of the above.

Influencing Skills

Self-Expression - effective verbal and non-verbal communication.

Focus - (not a true skill) a framework for analyzing conversational flow.

Directions - telling another person what to do.

Self-Disclosure - sharing of personal experience.

Interpretation - providing alternative explanations for another's experience.

Direct-Mutual Communication - here and now dyadic encounter.

Figure 6. Ivey's microskill taxonomy with explanations of each skill.

Optimized = Balanced emphasis on all goals

Suboptimized = Limited emphasis on a narrow range of goals

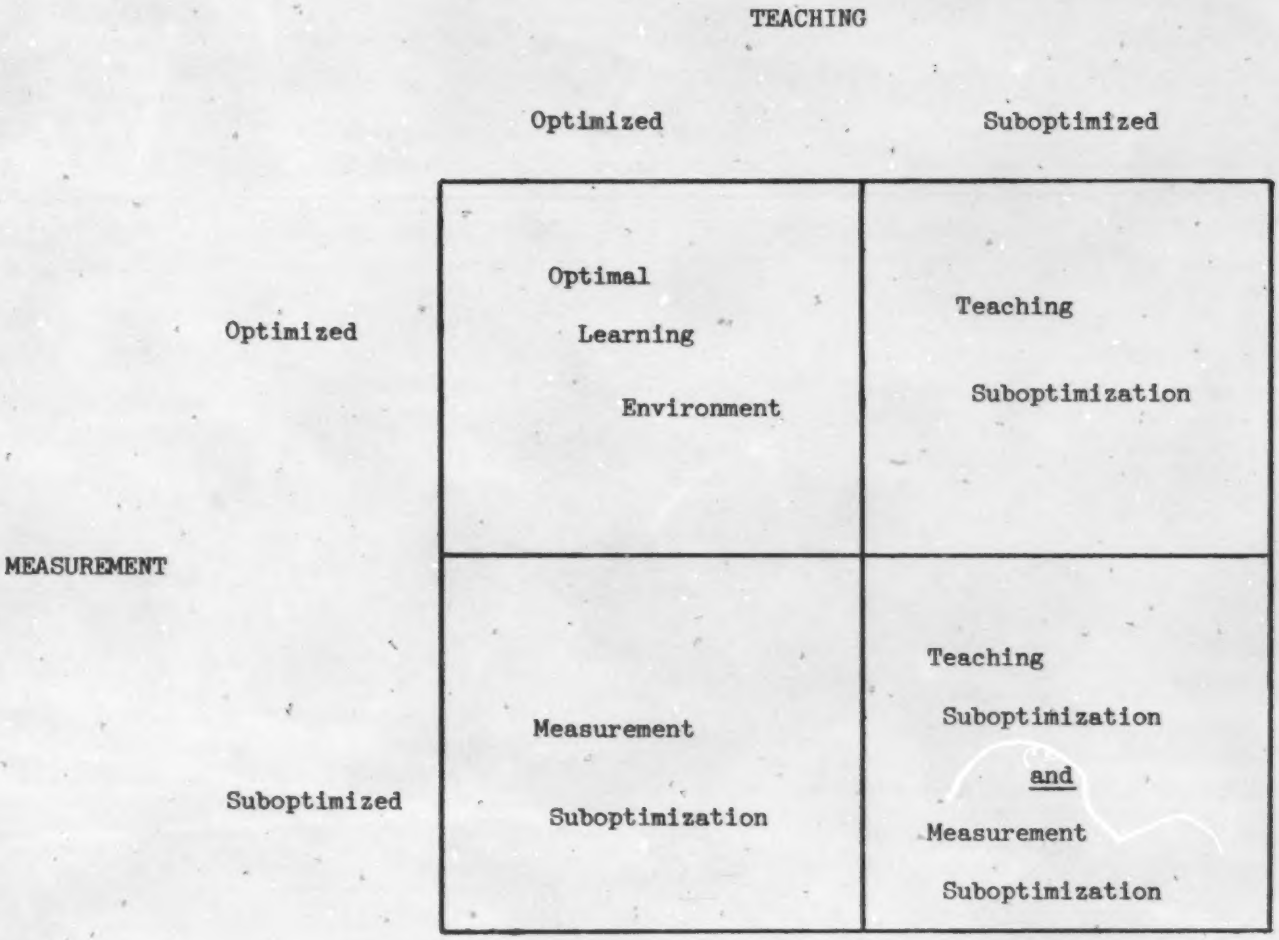

Figure 7. Suboptimization of outcomes. Combinations of teaching suboptimization and measurement suboptimization.